

**NEVADA DEPARTMENT OF  
CONSERVATION & NATURAL RESOURCES**

**STATE ENVIRONMENTAL COMMISSION**

**HEARING ARCHIVES FOR**

**REGULATORY PETITIONS**

**COMMISSION PETITION NO. 2000-10**

**LEGISLATIVE COUNSEL BUREAU (LCB) FILE NO. R-104-00**

**DOCUMENTS INCLUDED IN THIS FILE:**

**YES SECRETARY OF STATE FILING FORM**

**YES DISCLOSURE STATEMENT PURSUANT TO NRS 233B**

**REGULATORY PETITIONS**

**ORIGINAL DRAFTED BY COMMISSION**

**ADOPTED BY COMMISSION**

**AS FILED AND CODIFIED BY LCB**

Secretary of State  
Filing Data

**For Filing Administrative  
Regulations**

For Emergency  
Regulations Only

Effective Date

Expiration Date

Governor's Signature

### State Environmental Commission

Classification ☐ Proposed ☐ Adopted By Agency ☒ Temporary ☐ Emergency ☐

**Brief description of action:** **Petition 2000-10 (LCB R-104-00)** is a permanent amendment to NAC 445A.119 to 445A.225, the water pollution control standards for water quality. The amendment adds new water quality standards and beneficial uses for Walker Lake and amends the standards for various reaches of the East and West forks of the Walker River. A new control point is proposed to be added on the east Walker River at Bridge B-1475 at the state line with California. Amendments are proposed for NAC 445A.159 to 445A.169, inclusive including Sweetwater Creek and Desert Creek of the Walker River. Amendments vary for each reach defined above, but include: temperature, pH, total phosphates, nitrogen species as N, Dissolved Oxygen, suspended solids, turbidity, color, total dissolved solids, chloride, sulfate, the sodium adsorption ratio, alkalinity and Escherichia coli. It is proposed to revise the time period that adult Lahontan cutthroat trout may be present in the reach from Walker Lake to Weber Reservoir

**Authority citation other than 233B:** NRS 445A.425 (1-16) and 445A.520

**Notice date:** November 3, November 9, and November 14, 2000

**Hearing date:** December 5, 2000 and February 15, 2001

**Date of Adoption of Agency:** February 15, 2001

**LEGISLATIVE REVIEW OF ADOPTED REGULATIONS AS REQUIRED  
BY ADMINISTRATIVE PROCEDURES ACT, NRS 233B.066  
PERMANENT PETITION 2000-10 (R-104-00)  
STATE ENVIRONMENTAL COMMISSION**

The following statement is submitted for adopted amendments to Nevada Administrative Code (NAC) 445A. This permanent regulation establishes water quality standards for the Walker Lake and amends existing standards of the Walker River.

**1. A description of how public comment was solicited, a summary of public response, and an explanation how other interested persons may obtain a copy of the summary.**

**Petition 2000-10 (R-104-00)**, was noticed three (3) times: November 3, November 9 and November 14, 2000 as a permanent regulation in the Las Vegas Review Journal and the Reno Gazette-Journal newspapers. Workshops were held January 20, 2000 and September 6, 2000 in Yerington and Hawthorne prior to the regulatory hearing (exhibits 4, 5 & 6 of the December 5, 2000 hearing) as well as numerous meetings with individual stakeholders. The State Environmental Commission on February 15, 2001 again held a hearing receiving additional testimony and it acted to amend and adopt this petition. The initial hearing was held on December 5, 2000 in Yerington. Extensive comments were received by the Commission at the hearings supporting and opposing of this permanent regulation. The primary issue of concern was the new total dissolved solids standard (TDS) proposed for Walker Lake and the effect this would have on the sustainability of a Lahontan Cutthroat Trout fishery in Walker Lake. Concern was also expressed as to the viability of other key aquatic species such as the tui chub. In regards to the TDS, standard many supporting and opposing views were presented to the Commission. Supporters of the TDS standard wanted to reduce the numeric standards and opponents of the standard wanted to see a higher number or a sliding standard based upon the lake water level and climatic conditions. Other concerns focused on the viability of the temperature standards to allow for Lahontan cutthroat trout in the East and West Walker Rivers. It was expressed that other pollutants such as ammonia, arsenic and phosphorus be directly included in these standards. Concern was expressed about the water temperature in the lower reaches of the river, especially below Weber Reservoir. The viability of the fishery in the rivers is correlated with river flows. Concern was expressed that the economic impact upon businesses was not adequately addressed. (See section 5 for response). The impact upon farmers, and the incentives to conserve and trade offs inherent in water conservation were discussed. A substantial dialog ensued over meeting the Lake's water quality standards and the impact upon water rights for upstream users. Concern was expressed that the proposed Lake standards were not attainable (see Section 4 of this report) due to droughts which could be caused by man's use of water or by natural climatic variations. It was expressed that innovative approaches were needed to achieve the Lake standards especially during dry water years. Suggestions were made to increase the availability of water through cloud seeding and to engineer a solution to Walker Lake by bifurcating the lake with a coffer dam. Arguments were made that the Commission could not set water quality standards that are not reasonably attainable.

The public was mailed the notice of intent and agenda through the Environmental Commission's mailing list. A copy of the written comments may be obtained by calling the Nevada State Environmental Commission (775) 687-4670 extension 3117, or writing to the Commission at 333 W. Nye Ln., Room 138, Carson City, Nevada 89706-0851.

**2. The number persons who:**

<b>(a)</b>	<b>Attended each hearing;</b>	90/48
<b>(b)</b>	<b>Testified at each hearing:</b>	15/11
<b>(c)</b>	<b>Submitted to the agency written comments:</b>	18

**3. A description of how comment was solicited from affected businesses, a summary of their response, and a explanation how other interested persons may obtain a copy of the summary.**

Comments were solicited from affected businesses by the notices in the newspapers, as outlined in #1 and by direct mail to interested persons subscribing to the Commission's mailing list. See above statement for dates of the public notices and public workshops. No oral or written testimony was received by business interests that opposed or supported the permanent regulation, however citizens testified who were farmers did testify and these comments are reflected in the public comments in Section 1. A copy of the written comments may be obtained by calling the Nevada State Environmental Commission (775) 687-4670 or writing to the Commission at 333 W. Nye Ln., Room 138, Carson City, Nevada 89706-0851.

**4. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.**

The permanent regulation was adopted by the State Environmental Commission on February 15, 2001 with various amendments. The most crucial amendment was to revise the proposed total dissolved solids (TDS) standard for Walker Lake from 10,000 mg/l to 12,000 mg/l.

**5. The estimated economic effect of the adopted regulation on the business which it is to regulate and on the public. These must be stated separately, and each case must include:**

- (a) Estimated economic effect of the regulation on the business which it is to regulate;

The proposed regulation will not have an adverse economic impact on businesses, since the amendments do not directly regulate businesses. There is a possible long-term impact of secondary adverse economic effects on the agricultural community if the proposed standards are used by other government agencies to acquire water rights for the benefit of Walker Lake. This may in turn result in other actions, such as water conservation measures, that might result in investment and expenditures. The standards will provide a long-term protection of Walker Lake that will have a beneficial economic effect on tourism related business, especially relating to the economy of Mineral county.

- (b) Estimated economic effect on the public;

The adoption of this regulation is not anticipated to have a direct short or long term adverse economic impact upon the public.

**6. The estimated cost to the agency for enforcement of the adopted regulation.**

There is no additional cost to the agency for enforcement.

**7. A description of any regulations of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.**

The regulations do not overlap or duplicate any regulations of another state or local governmental agency.

**8. If the regulation includes provisions which are more stringent than a federal regulation which regulates the same activity, a summary of such provisions.**

The regulations are no more stringent than federal regulations. The federal government has delegated the responsibility of establishing water quality standards to the state, therefore, there is no federal regulation for water quality standards for the Walker River Basin.

**9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.**

This regulation does not provide for a new fee or increase of an existing fee.

# # # #

**ADOPTED PERMANENT REGULATION OF THE  
NEVADA STATE ENVIRONMENTAL COMMISSION**

**LCB File No. R104-00**

October 4, 2000

Explanation - Matter in *italics* is new; matter in brackets [~~omitted material~~] is material to be omitted.

Authority: §§ 1-16, NRS 445A.425 and 445A.520.

**Section 1.** Chapter 445A of NAC is hereby amended by adding thereto the provisions set forth as section 2 to 5, inclusive, of this regulation.

**Sec. 2.** *Water quality standards established in NAC 445A.070 to 445A.348 must not be construed to amend, modify or supersede rights to quantities of water which have been established by the state engineer or by applicable court decree.*

**Sec. 3.** *The standards of water quality for the Walker Lake are prescribed in Section 4 of this regulation.*

*The beneficial uses for this area are:*

- 1. Recreation involving contact with the water;*
- 2. Recreation not involving contact with water;*
- 3. Propagation of wildlife; and*
- 4. Propagation of aquatic life, and more specifically, the species of major concern are the tui chub, the Tahoe sucker and adult and juvenile Lahontan cutthroat trout.*

Sec. 4.

**STANDARDS OF WATER QUALITY**

*Walker Lake*

*Control Point at Sportsman's Beach. The limits of this table apply only to Walker Lake at Sportsman's Beach.*

<b>PARAMETER</b>	<b>REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY</b>	<b>WATER QUALITY STANDARDS FOR BENEFICIAL USES</b>	<b>BENEFICIAL USES (Most Stringent Use Listed First)</b>
<i>Temperature<sup>a</sup> Single Value</i>	--	$T \leq 2^{\circ}\text{C}$	<i>Propagation of aquatic life.</i>
<i>pH Single Value</i>	--	<i>Within Range 6.5 - 9.7 SU</i>	<i>Propagation of aquatic life, recreation involving contact with water and propagation of wildlife.</i>
<i>Dissolved Oxygen Single Value</i>	--	$\geq 5 \text{ mg/l}$	<i>Propagation of aquatic life, recreation involving contact with water, recreation not involving contact with water, and propagation of wildlife.</i>
<i>Suspended Solids Single Value</i>	--	$\leq 25 \text{ mg/l}$	<i>Propagation of aquatic life.</i>
<i>Nitrogen Species as N  Annual Average  Single Value  Single Value</i>	<i>Total Inorganic Nitrogen: <math>\leq 0.18 \text{ mg/l}^b</math>  <math>\leq 0.30 \text{ mg/l}</math></i>	<i>Nitrate: <math>\leq 90 \text{ mg/l}</math>  Nitrite: <math>\leq 0.06 \text{ mg/l}</math></i>	<i>Propagation of aquatic life and propagation of wildlife.</i>
<i>Total Phosphate ( as P) Single Value</i>	--	$\leq 0.82 \text{ mg/l}$	<i>Propagation of aquatic life.</i>
<i>Total Dissolved</i>			<i>Propagation of aquatic life.</i>

<i>Solids Single Value</i>	--	$\leq 12,000 \text{ mg/l}$	
<i>Chloride Single Value</i>	--	$\leq 3,200 \text{ mg/l}$	<i>Propagation of wildlife.</i>
<i>Arsenic</i>	--	$\leq 1,050 \text{ }\mu\text{g/l}$	<i>Propagation of aquatic life.</i>
<i>E. coli 30-day Log Mean Single Value</i>	-- --	$\leq 126 \text{ MF/100 ml}$ $\leq 235 \text{ MF/100 ml}$	<i>Recreation involving contact with water and recreation not involving contact with water.</i>

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.

b. TIN annual average computed for calendar year.

~~[Because Walker Lake is a body of water without a natural outlet, the commission recognizes that water quality can be significantly impacted by climatic conditions and thus that attainment of standards may not be achievable at all times.]~~

Sec. 5.

**STANDARDS OF WATER QUALITY**

*East Walker River*

*Control Point at the East Walker River at Bridge B-1475. The limits of this table apply only to the East Walker River at Bridge B-1475 to the East Walker River at the state line.*

<b>PARAMETER</b>	<b>REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY</b>	<b>WATER QUALITY STANDARDS FOR BENEFICIAL USES</b>	<b>BENEFICIAL USES (Most stringent use listed first)</b>
<i>Temperature Single Value</i>	$T = 0^{\circ}\text{C}^a$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $T \leq 0^{\circ}\text{C}^a$	<i>Propagation of aquatic life and recreation involving contact with water.</i>
<i>pH Single Value</i>	--	Within Range 6.5 - 9.0 SU $\text{pH}: \pm 0.5 \text{ SU Max.}$	<i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
<i>Total Phosphates (as P) Annual Average</i>	--	$\leq 0.10 \text{ mg/l}$	<i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and recreation not involving contact with water.</i>
<i>Nitrogen Species as N Single Value</i>  <i>Single Value</i>  <i>Single Value</i>  <i>Annual Average</i>	<i>Total Nitrogen</i> $\leq 1.7 \text{ mg/l}$    $\leq 0.9 \text{ mg/l}$	<i>Nitrate</i> $\leq 10 \text{ mg/l}$  <i>Nitrite</i> $\leq 0.06 \text{ mg/l}$  <i>Ammonia S.V.</i> $\leq 0.02 \text{ mg/l}$ (un-ionized)	<i>Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife, and recreation not involving contact with water.</i>
<i>Dissolved Oxygen Single Value</i>	--	Nov.-May: $\geq 6.0 \text{ mg/l}$ June-Oct.: $\geq 5.0 \text{ mg/l}$	<i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and recreation not involving contact with water.</i>
<i>Suspended Solids Single Value</i>	--	$\leq 80 \text{ mg/l}$	<i>Propagation of aquatic life.</i>
<i>Turbidity Single Value</i>	--	<b>B</b>	<i>Propagation of aquatic life and municipal or domestic supply, or both.</i>
<i>Color Single Value</i>	--	$\leq 75 \text{ PCU}$	<i>Municipal or domestic supply, or both, propagation of aquatic life.</i>
<i>Total Dissolved Solids Single Value</i> <i>Annual Average</i>	$\leq 390 \text{ mg/l}$ $\leq 320 \text{ mg/l}$	$\leq 500 \text{ mg/l}$	<i>Municipal or domestic supply, or both, irrigation and watering of livestock.</i>

<b>Chloride</b> <i>Single Value</i> <i>Annual Average</i>	$\leq 19$ mg/l $\leq 13$ mg/l	$\leq 250$ mg/l	<i>Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.</i>
<b>Sulfate</b> <i>Single Value</i>	--	$\leq 250$ mg/l	<i>Municipal or domestic supply or both.</i>
<b>Sodium</b> <i>Adsorption Ratio</i> <i>Annual Average</i>	--	$\leq 8$	<i>Irrigation and municipal or domestic supply, or both.</i>
<b>Alkalinity (as CaCO<sub>3</sub>)</b>	--	<i>less than 25% change from natural conditions</i>	<i>Propagation of aquatic life and propagation of wildlife.</i>
<b>Escherichia coli</b> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	<i>126 MF/100 ml</i> <i>235 MF/100 ml</i>	<i>Recreation involving contact with water, recreation not involving contact with water, municipal or domestic supply, or both, irrigation and watering of livestock.</i>

**a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.**

**b. Increase in turbidity must not be more than 10 NTU above natural conditions.**

**Sec. 6.** NAC 445A.159 is hereby amended to read as follows:

445A.159 The standards of water quality for the Walker River from Walker Lake to the state line are prescribed in NAC 445A.160 to 445A.169, inclusive~~[-]~~, **and section 5 of this regulation.** The beneficial uses for this area are:

1. Irrigation;
2. Watering of livestock;
3. Recreation involving contact with the water;
4. Recreation not involving contact with water;
5. Industrial supply;
6. Municipal or domestic supply, or both;
7. Propagation of wildlife; and
8. Propagation of aquatic life, and more specifically, the species of major concern are:
  - (a) In the West Walker River at the state line, **mountain whitefish**, rainbow trout and brown trout;
  - (b) In Topaz Lake, rainbow trout, cutthroat trout, brown trout, ~~{kokone}~~ **kokanee** salmon and silver salmon;
  - (c) In the West Walker River from Wellington to the state line, **mountain whitefish**, rainbow trout and brown trout;
  - (d) In the West Walker River from its confluence with the East Walker River to Wellington, brown trout and rainbow trout;
  - (e) In Sweetwater Creek, brown trout, brook trout, **mountain whitefish** and rainbow trout;
  - (f) In the East Walker River at the state line, mountain ~~{white fish}~~ **whitefish**, rainbow trout and brown trout;
  - (g) **In the East Walker River from Bridge B-1475 to the state line, mountain whitefish, brown trout and rainbow trout;**
  - (h) In the East Walker River from its confluence with the West Walker River ~~{to the state line}~~ **to Bridge B-1475**, brown trout and rainbow trout;
  - ~~{(h)}~~ **(i)** In the Walker River from Weber Reservoir to the confluence of the East Walker River and West Walker River, channel catfish and largemouth bass;
  - ~~{(j)}~~ **(j)** In the Walker River from the inlet to Walker Lake to Weber Reservoir~~[-]~~, **channel catfish**~~[-]~~;
    - (1) Year round, channel catfish and largemouth bass**~~[-]~~; **and**
    - (2) From February through June**, adult Lahontan cutthroat trout ~~{from April through May}~~, and adult rainbow trout ~~{from April through June}~~; **and**
  - ~~{(j)}~~; **and**
  - (k) In Desert Creek, brown trout, brook trout and rainbow trout.

Sec. 7. NAC 445A.160 is hereby amended to read as follows:  
445A.160

## STANDARDS OF WATER QUALITY

### West Walker River *at state line*

Control Point at the West Walker River at the state line. The limits of this table apply only to the West Walker River at the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature [ <del>°C</del> <del>Maximum</del> <del>T<sup>a</sup></del> ] <i>Single Value</i>	July-Oct.: ≤22°C  T = 0°C <sup>a</sup>	Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C T ≤2°C <sup>a</sup>	<del>[Aquatic life<sup>b</sup> and water contact recreation.]</del> Propagation of aquatic life and recreation involving contact with water.
pH [Units] <i>Single Value</i>	--	<del>[S.V.: 7.0 - 8.3] Within Range</del> 6.5 - 9.0 SU  pH: ±0.5 SU Max.	<del>[Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>.]</del> Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, <del>[stock watering]</del> watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates (as P) [ <del>mg/l</del> ] <i>Annual Average</i>	--	[A-Avg.:] ≤0.1 mg/l	<del>[Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>.]</del> Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and <del>[noncontact recreation.]</del> recreation not involving contact with water.
Nitrogen Species [(N) - mg/l] as N <i>Annual Average</i> <i>Single Value</i> <i>Single Value</i>	Total Nitrogen [A-Avg.:] ≤0.6 [S.V.:] ≤0.6 mg/l ≤0.9: mg/l	Nitrate [S.V.:] ≤10 [Nitrite S.V.:] ≤10 mg/l Nitrite ≤0.06 mg/l  Ammonia S.V.: ≤0.02 mg/l (un-ionized)	Municipal or domestic <del>[supply<sup>b</sup>, aquatic life<sup>b</sup> water contact recreation, stock watering, wildlife propagation and noncontact recreation.]</del> supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.
Dissolved Oxygen [- mg/l] <i>Single Value</i>	--	[S.V.:] Nov.-Apr.: ≥6.0 May-Oct.: Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥5.0 mg/l	<del>[Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering.]</del> Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and <del>[noncontact recreation.]</del> recreation not involving contact with water.
Suspended Solids [ <del>mg/l</del> ] <i>Annual Average</i> <i>Single Value</i>	[A-Avg.:] ≤60 mg/l	[S.V.:]  ≤80 mg/l	<del>[Aquatic life<sup>b</sup>.]</del> Propagation of aquatic life.
Turbidity [ <del>NTU</del> ] <i>Single Value</i>	--	[d] b	<del>[Aquatic life<sup>b</sup>.]</del> Propagation of aquatic life and municipal or domestic supply <del>[.]</del> , or both.

Color <del>{PCU}</del> <i>Single Value</i>	<del>{}</del> $\leq 26 \text{ PCU}$	<del>{}</del> $\leq 75 \text{ PCU}$	<del>{Aquatic life<sup>b</sup> and municipal}</del> <i>Municipal or domestic supply</i> <del>{}, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{mg/l}</del> <i>Annual Average Single Value</i>	<del>{A. Avg.: <math>\leq 165</math> — S.V.: <math>\leq 220 \text{ mg/l}</math>}</del> $\leq 165 \text{ mg/l}$ $\leq 220 \text{ mg/l}$	<del>{A. Avg.:}</del> $\leq 500 \text{ mg/l}$	Municipal or domestic <del>{supply<sup>b</sup>}</del> , <i>supply, or both</i> , irrigation and <del>{stock watering&gt;}</del> <i>watering of livestock.</i>
<del>{Chlorides — mg/l}</del> <i>Chloride Annual Average Single Value</i>	<del>{A. Avg.: <math>\leq 15</math> — S.V.: <math>\leq 20</math>}</del> $\leq 15 \text{ mg/l}$ $\leq 20 \text{ mg/l}$	<del>{S.V.:}</del> $\leq 250 \text{ mg/l}$	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation}</del> , <i>supply or both, propagation of wildlife</i> , irrigation and <del>{stock watering}</del> <i>watering of livestock.</i>
Sulfate <del>{mg/l}</del> <i>Single Value</i>	<del>{}</del> $\leq 25 \text{ mg/l}$	<del>{S.V.:}</del> $\leq 250 \text{ mg/l}$	Municipal or domestic <del>{supply<sup>b</sup>}</del> <i>supply, or both.</i>
Sodium <del>{SAR}</del> <i>Adsorption Ratio Annual Average</i>	--	<del>{A. Avg.:}</del> $\leq 8$	<del>{Irrigation<sup>b</sup>}</del> <i>Irrigation</i> and municipal or domestic supply <del>{}, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation}</del> <i>Propagation of aquatic life and propagation of wildlife.</i>
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli Annual Geometric Mean Single Value</i>	<del>{A.G.M.: <math>\leq 100</math>}</del>  -- --	$[\leq 200/400^e]$   <i>126 MF/100 ml</i> <i>235 MF/100 ml</i>	<del>{Water contact recreation<sup>b</sup>, noncontact recreation}</del> <i>Recreation involving contact with water, recreation not involving contact with water</i> , municipal or domestic supply, <i>or both</i> , irrigation <del>{wildlife propagation and stock watering}</del> <i>and watering of livestock.</i>

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~{Increase in turbidity must not be more than 10 NTU above natural conditions.~~

~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

**Sec. 8.** NAC 445A.161 is hereby amended to read as follows:  
445A.161

## STANDARDS OF WATER QUALITY

## Topaz Lake

Control Point at Topaz Lake. The limits of this table apply at various points in Topaz Lake.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature $^{\circ}\text{C}$ <del>Maximum</del>  <del><math>\text{--T}^{\text{a}}</math></del> <i>Single Value</i>	   $\text{--T} = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\text{--T} \leq 2^{\circ}\text{C}^{\text{a}}$	<del><math>\text{--Aquatic life}^{\text{b}}</math></del> <i>Propagation of aquatic life and recreation involving contact with water.</i> <del><math>\text{--contact recreation--}</math></del>
pH <del>[Units]</del> <i>Single Value</i>	--	<del>[S.V.: 7.0 — 8.3]</del> <i>Within Range 6.5 - 9.0 SU</i> $\text{--pH: } \pm 0.5 \text{ SU Max.}$	<del><math>\text{--Water contact recreation}^{\text{b}}</math>, <math>\text{--wildlife propagation}^{\text{b}}</math>, <math>\text{--aquatic life}</math>, <math>\text{--irrigation}</math>, <math>\text{--stock watering--}</math></del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
Total Phosphates (as P) <del><math>\text{--mg/l}</math></del> <i>Annual Average</i> <i>Single Value</i>		<del><math>\text{--A Avg.: } \leq 0.05</math> <math>\text{--S.V.:}</math></del> $\leq 0.05 \text{ mg/l}$ $\leq 0.10 \text{ mg/l}$	<del><math>\text{--Aquatic life}^{\text{b}}</math>, <math>\text{--water contact recreation}^{\text{b}}</math></del> <i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and</i> <del><math>\text{--noncontact recreation--}</math></del> <i>recreation not involving contact with water.</i>
Nitrogen Species <del><math>\text{--(N) --mg/l}</math></del> as N <i>Annual Average</i> <i>Single Value</i>  <i>Single Value</i>  <i>Single Value</i>	Total Nitrogen <del><math>\text{--A Avg.: } \leq 0.6</math> <math>\text{--S.V.: } \leq 1.0</math></del> : $\leq 0.6 \text{ mg/l}$ $\leq 1.0 \text{ mg/l}$	Nitrate <del><math>\text{--S.V.: } \leq 10</math> <math>\text{--Nitrite S.V.:}</math></del> $\leq 10 \text{ mg/l}$ Nitrite $\leq 0.06 \text{ mg/l}$  Ammonia S.V.: $\leq 0.02 \text{ mg/l}$ (un-ionized)	Municipal or domestic <del><math>\text{--supply}^{\text{b}}</math>, <math>\text{--aquatic life}^{\text{b}}</math>, <math>\text{--water contact recreation}</math>, <math>\text{--stock watering}</math>, <math>\text{--wildlife propagation}</math> and <math>\text{--noncontact recreation--}</math></del> <i>supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.</i>
Dissolved Oxygen <del><math>\text{--mg/l}</math></del> <i>Single Value</i>	--	<del><math>\text{--S.V.:}</math></del> Nov.- Apr.: $\geq 6.0$ : <del>May-Oct.:}</del> Nov.-May: $\geq 6.0 \text{ mg/l}$ Jun.-Oct. <sup>b</sup> : $\geq 5.0 \text{ mg/l}$	<del><math>\text{--Aquatic life}^{\text{b}}</math>, <math>\text{--water contact recreation}</math>, <math>\text{--wildlife propagation}</math>, <math>\text{--stock watering--}</math></del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and</i> <del><math>\text{--noncontact recreation--}</math></del> <i>recreation not involving contact with water.</i>
Suspended Solids <del><math>\text{--mg/l}</math></del> <i>Annual Average</i> <i>Single Value</i>	<del><math>\text{--A Avg.: } \leq 6.0</math> <math>\text{--S.V.:}</math></del> $\leq 6.0 \text{ mg/l}$ $\leq 9.0 \text{ mg/l}$	<del><math>\text{--S.V.:}</math></del>  $\leq 25 \text{ mg/l}$	<del><math>\text{--Aquatic life}^{\text{b}}</math></del> <i>Propagation of aquatic life.</i>
Turbidity <del><math>\text{--NTU}</math></del> <i>Annual Average</i>	<del><math>\text{--A Avg.: } \leq 3.0</math> <math>\text{--S.V.:}</math></del> $\leq 3.0 \text{ NTU}$	<del><math>\text{--d}</math></del>  $\text{--c}$	<del><math>\text{--Aquatic life}^{\text{b}}</math></del> <i>Propagation of aquatic life and municipal or domestic supply</i> <del><math>\text{--}</math></del> , <i>or both.</i>

<i>Single Value</i>	≤5.0 NTU		
Color <del>{PCU}</del> <i>Single Value</i>	<del>{}</del> ≤21 PCU	<del>{}</del> ≤75 PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> Municipal or domestic supply <del>{}, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{mg/l}</del> <i>Annual Average</i> <i>Single Value</i>	<del>{A.Avg.: ≤105 —S.V.:}</del> ≤105 mg/l ≤120 mg/l	<del>{A.Avg.:}</del> ≤500 mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> , supply, or both, irrigation and <del>{stock watering}</del> watering of livestock.
<del>{Chlorides—mg/l}</del> Chloride <i>Annual Average</i> <i>Single Value</i>	<del>{A.Avg.: ≤7 —S.V.:}</del> ≤7 mg/l ≤10 mg/l	<del>{S.V.:}</del> -- ≤250 mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation}</del> supply or both, propagation of wildlife, irrigation and <del>{stock watering}</del> watering of livestock.
Sulfate <del>{mg/l}</del> <i>Single Value</i>	<del>{}</del> ≤25 mg/l	<del>{S.V.:}</del> ≤250 mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> supply, or both.
Sodium <del>{SAR}</del> <i>Adsorption Ratio</i> <i>Annual Average</i>	--	<del>{A.Avg.:}</del> ≤8	<del>{Irrigation<sup>b}</sup>}</del> Irrigation and municipal or domestic supply <del>{}, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation}</del> Propagation of aquatic life and propagation of wildlife.
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> <i>Annual</i> <i>Geometric Mean</i> <i>Single Value</i>	<del>{A.G.M.: ≤25 —S.V.: ≤100}</del> -- --	<del>{≤200/400<sup>c</sup>}</del>  126 MF/100 ml 235 MF/100 ml	<del>{Water contact recreation<sup>b</sup>, noncontact recreation}</del> Recreation involving contact with water, recreation not involving contact with water, municipal or domestic supply, or both, irrigation <del>{wildlife propagation and stock watering}</del> and watering of livestock.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~The dissolved oxygen standard from June to October applies only to the epilimnion.~~

c. Increase in turbidity must not be more than 10 NTU above natural conditions.

~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

Sec. 9. NAC 445A.162 is hereby amended to read as follows:

445A.162

## STANDARDS OF WATER QUALITY

### West Walker River *near Wellington*

Control Point at the West Walker River near Wellington. The limits of this table apply from the West Walker River near Wellington to the West Walker River at the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature <sup>1</sup> °C <del>Maximum</del> <del>T</del> <sup>a</sup> Single Value	<del>T</del> = 0°C <sup>a</sup>	Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C <del>T</del> ≤2°C <sup>a</sup>	<del>Aquatic life<sup>b</sup></del> Propagation of aquatic life and recreation involving contact with water. <del>contact recreation</del>
pH <del>[Units]</del> Single Value	--	<del>[S.V.: 7.0 - 8.3]</del> Within Range 6.5 - 9.0 SU <del>pH</del> : ±0.5 SU Max.	<del>[Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering.]</del> Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, <i>or both</i> , and industrial supply.
Total Phosphates (as P) <del>[mg/l]</del> Annual Average Single Value	<del>[A. Avg.: ≤0.07 — S.V.: ]</del> ≤0.07 mg/l ≤0.10 mg/l	<del>[A. Avg.: ]</del> ≤0.1 mg/l	<del>Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>]</del> Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, <i>or both</i> , and <del>noncontact recreation</del> recreation not involving contact with water.
Nitrogen Species <del>[(N) - mg/l]</del> as N  Annual Average Single Value  Single Value  Single Value	Total Nitrogen <del>[A. Avg.: ≤0.6 — S.V.: ]</del> : ≤0.6 mg/l ≤1.0 mg/l	Nitrate <del>[S.V.: ≤10 — Nitrite S.V.: ]</del> ≤10 mg/l Nitrite ≤0.06 mg/l  Ammonia S.V.: ≤0.02 mg/l (un-ionized)	Municipal or domestic <del>[supply<sup>b</sup>, aquatic life<sup>b</sup>, water contact recreation, stock watering, wildlife propagation and noncontact recreation.]</del> supply, <i>or both</i> , propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.
Dissolved Oxygen <del>[mg/l]</del> Single Value	--	<del>[S.V.: ]</del> Nov.-May: ≥6.0 mg/l June-Oct.: ≥5.0 mg/l	<del>Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering.]</del> Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, <i>or both</i> , and <del>noncontact recreation</del> recreation not involving contact with water.
Suspended Solids <del>[mg/l]</del> Annual Average Single Value	-- --	<del>[S.V.: ]</del>  ≤80 mg/l	<del>Aquatic life<sup>b</sup>]</del> Propagation of aquatic life.

Turbidity <del>{ NTU }</del> <i>Single Value</i>	--	<del>{ d }</del> <i>b</i>	<del>{ Aquatic life<sup>b</sup> }</del> <i>Propagation of aquatic life</i> and municipal or domestic supply <del>{ }, or both.</del>
Color <del>{ PCU }</del> <i>Single Value</i>	--	<del>{ e }</del> <i>≤ 75 PCU</i>	<del>{ Aquatic life<sup>b</sup> and municipal }</del> <i>Municipal</i> or domestic supply <del>{ }, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{ mg/l }</del> <i>Annual Average Single Value</i>	<del>{ A.Avg.: ≤ 175 — S.V.: }</del> <i>≤ 175 mg/l ≤ 260 mg/l</i>	<del>{ A.Avg.: }</del> <i>≤ 500 mg/l</i>	Municipal or domestic <del>{ supply<sup>b</sup> }</del> , <i>supply, or both</i> , irrigation and <del>{ stock watering }</del> <i>watering of livestock.</i>
<del>{ Chlorides — mg/l }</del> <i>Chloride Annual Average Single Value</i>	<del>{ A.Avg. ≤ 16 — S.V.: }</del> <i>≤ 16 mg/l ≤ 30 mg/l</i>	<del>{ S.V.: }</del> <i>≤ 250 mg/l</i>	Municipal or domestic <del>{ supply<sup>b</sup>, wildlife propagation }</del> , <i>supply or both, propagation of wildlife</i> , irrigation and <del>{ stock watering }</del> <i>watering of livestock.</i>
Sulfate <del>{ mg/l }</del> <i>Single Value</i>	--	<del>{ S.V.: }</del> <i>≤ 250 mg/l</i>	Municipal or domestic <del>{ supply<sup>b</sup> }</del> <i>supply, or both.</i>
Sodium <del>{ SAR }</del> <i>Adsorption Ratio Annual Average</i>	-- --	<del>{ A.Avg.: }</del> <i>≤ 8</i>	<del>{ Irrigation<sup>b</sup> }</del> <i>Irrigation</i> and municipal or domestic supply <del>{ }, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{ mg/l }</del>	--	less than 25% change from natural conditions	<del>{ Aquatic life<sup>b</sup> and wildlife propagation }</del> <i>Propagation of aquatic life and propagation of wildlife.</i>
<del>{ Fecal Coliform No./100 ml }</del> <i>Escherichia coli Annual Geometric Mean Single Value</i>	<del>{ A.G.M.: ≤ 50 — S.V.: ≤ 150 }</del>  -- --	<del>{ ≤ 200/400* }</del>  <i>126 MF/100 ml 235 MF/100 ml</i>	<del>{ Water contact recreation<sup>b</sup>, noncontact recreation }</del> <i>Recreation involving contact with water, recreation not involving contact with water</i> , municipal or domestic supply, <i>or both</i> , irrigation <del>{ wildlife propagation and stock watering }</del> <i>and watering of livestock.</i>

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{ The most restrictive beneficial use.~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~Increase in turbidity must not be more than 10 NTU above natural conditions.~~

e. ~~Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.~~

**Sec. 10.** NAC 445A.163 is hereby amended to read as follows:  
445A.163

## STANDARDS OF WATER QUALITY

### West Walker River *above confluence with East Walker River at Nordyke Road*

Control Point at the West Walker River above the confluence with the East Walker River at Nordyke Road. The limits of this table apply to the West Walker River above its confluence with the East Walker River to the control point mentioned in NAC 445.162(near Wellington).

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature <sup>°C</sup> <del>Maximum</del> <del>—T<sup>a</sup>—</del> <i>Single Value</i>	<del>T = 0°C<sup>a</sup></del>	Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C <del>T ≤2°C<sup>a</sup></del>	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and recreation involving contact with water.</i> <del>{contact recreation}</del>
pH <del>{Units}</del> <i>Single Value</i>	--	<del>{S.V.: 7.0 — 8.3}</del> <i>Within Range</i> 6.5 - 9.0 SU _pH: ±0.5 SU Max.	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
Total Phosphates (as P) <del>{—mg/l}</del> <i>Annual Average</i> <i>Single Value</i>	<del>{S.V.:}</del>  ≤0.15 mg/l	<del>{A-Avg.:}</del>  ≤0.10 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>—}</del> <i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and {nonecontact recreation—} recreation not involving contact with water.</i>
Nitrogen Species <del>{(N)—mg/l}</del> as N  <i>Annual Average</i> <i>Single Value</i>  <i>Single Value</i>	Total Nitrogen <del>{A-Avg.: ≤1.0 —S.V.:}</del> : ≤1.0 mg/l ≤1.2 mg/l	Nitrate <del>{S.V.: ≤10 —Nitrite S.V.:}</del> ≤10 mg/l Nitrite ≤0.06 mg/l Ammonia S.V.: ≤0.02 mg/l (un-ionized)	Municipal or domestic <del>{supply<sup>b</sup>, aquatic life<sup>b</sup>—water contact recreation, stock watering, wildlife propagation and nonecontact recreation—}</del> <i>supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.</i>
Dissolved Oxygen <del>{—mg/l}</del> <i>Single Value</i>	--	<del>{S.V.:}</del>  Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥5.0 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and {nonecontact recreation—} recreation not involving contact with water.</i>
Suspended Solids <del>{—mg/l}</del> <i>Single Value</i>	--	<del>{S.V.:}</del> ≤80 mg/l	<del>{Aquatic life<sup>b</sup>—}</del> <i>Propagation of aquatic life.</i>
Turbidity <del>{—NTU}</del>			<del>{Aquatic life<sup>b</sup>—}</del> <i>Propagation of aquatic life and municipal</i>

<i>Single Value</i>	--	<del>{d}</del> <i>b</i>	or domestic supply <del>{f}</del> , or both.
Color <del>{PCU}</del> <i>Single Value</i>	<del>{f}</del> ≤ 46 PCU	<del>{e}</del> ≤ 75 PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> Municipal or domestic supply <del>{f}</del> , or both, and propagation of aquatic life.
Total Dissolved Solids <del>{mg/l}</del> <i>Annual Average</i> <i>Single Value</i>	<del>{A-Avg. ≤ 330</del> <del>—S.V.:}</del> ≤ 330 mg/l ≤ 425 mg/l	<del>{A-Avg.:}</del>  ≤ 500 mg/l	Municipal or domestic <del>{supply<sup>b}</sup>}</del> , supply, or both, irrigation and <del>{stock watering.}</del> watering of livestock.
<del>{Chlorides—mg/l}</del> <i>Chloride</i> <i>Annual Average</i> <i>Single Value</i>	<del>{A-Avg. ≤ 22</del> <del>—S.V.:}</del> ≤ 22 mg/l ≤ 28 mg/l	-- <del>{S.V.:}</del>  ≤ 250 mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation.}</del> supply or both, propagation of wildlife, irrigation and <del>{stock watering.}</del> watering of livestock.
Sulfate <del>{mg/l}</del> <i>Single Value</i>	<del>{f}</del> ≤ 74 mg/l	<del>{S.V.:}</del> ≤ 250 mg/l	Municipal or domestic <del>{supply<sup>b}</sup>}</del> supply, or both.
Sodium <del>{SAR}</del> <i>Adsorption Ratio</i> <i>Annual Average</i>	--	<del>{A-Avg.:}</del>  ≤ 8	<del>{Irrigation<sup>b}</sup>}</del> Irrigation and municipal or domestic supply <del>{f}</del> , or both.
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation.}</del> Propagation of aquatic life and propagation of wildlife.
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> <i>Annual</i> <i>Geometric Mean</i> <i>Single Value</i>	<del>{A.G.M.: ≤ 125</del> <del>—S.V.: ≤ 350}</del>  -- --	<del>{≤ 200/400<sup>e</sup>}</del>  126 MF/100 ml 235 MF/100 ml	<del>{Water contact recreation<sup>b</sup>, noncontact recreation.}</del> Recreation involving contact with water, recreation not involving contact with water, municipal or domestic supply, or both, irrigation <del>{wildlife propagation and stock watering.}</del> and watering of livestock.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.}~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~Increase in turbidity must not be more than 10 NTU above natural conditions.~~

~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

**Sec. 11.** NAC 445A.164 is hereby amended to read as follows:  
445A.164

## STANDARDS OF WATER QUALITY

### Sweetwater Creek

Control Point at Sweetwater Creek. The limits of this table apply to Sweetwater Creek from its confluence with the East Walker River to the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature <del>{°C}</del> <b>Maximum</b> <del>—T<sup>a</sup>—</del> <i>Single Value</i>	<del>—T = 0°C<sup>a</sup>—</del>	Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C <del>—T ≤2°C<sup>a</sup>—</del>	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and recreation involving contact with water.</i> <del>{contact recreation.}</del>
pH <del>{Units}</del> <i>Single Value</i>	--	<del>{S.V.: 7.0 — 8.3}</del> <i>Within Range</i> 6.5 - 9.0 SU <del>—pH: ±0.5 SU Max.</del>	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
Total Phosphates (as P) <del>{—mg/l}</del> <i>Annual Average</i>		<del>{A-Avg.:}</del>  ≤0.1 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>.}</del> <i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and {noncontact recreation.} recreation not involving contact with water.</i>
Nitrogen Species <del>{(N)—mg/l}</del> as N <i>Annual Average</i> <i>Single Value</i> <i>Single Value</i>	Total <del>{Nitrates</del> <del>A-Avg.: ≤0.25</del> <del>—S.V.:}</del> Nitrate: ≤0.25 mg/l ≤0.45 mg/l	Nitrate <del>{S.V.: ≤10</del> <del>—Nitrite S.V.:}</del> ≤10 mg/l Nitrite ≤0.06 mg/l Ammonia S.V.: ≤0.02 mg/l (un-ionized)	Municipal or domestic <del>{supply<sup>b</sup>, aquatic life<sup>b</sup>, water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.</i>
Dissolved Oxygen <del>{—mg/l}</del> <i>Single Value</i>	--	<del>{S.V.:}</del> Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥5.0 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and {noncontact recreation.} recreation not involving contact with water.</i>
Suspended Solids <del>{—mg/l}</del> <i>Single Value</i>	≤45 mg/l	<del>{S.V.:}</del> ≤80 mg/l	<del>{Aquatic life<sup>b</sup>.}</del> <i>Propagation of aquatic life.</i>
Turbidity <del>{—NTU}</del>			<del>{Aquatic life<sup>b</sup>.}</del> <i>Propagation of aquatic life and municipal</i>

Single Value	--	<del>{d}</del> <i>b</i>	or domestic supply <del>{,}, or both.</del>
Color <del>{PCU}</del> Single Value	--	<del>{e}</del> $\leq 75$ PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> Municipal or domestic supply <del>{,}, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{mg/l}</del> Annual Average Single Value	<del>{A-Avg.: <math>\leq 330</math> —S.V.:}</del> $\leq 220$ mg/l $\leq 300$ mg/l	<del>{A-Avg.:}</del>  $\leq 500$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> , supply, or both, irrigation and <del>{stock watering.}</del> watering of livestock.
<del>{Chlorides—mg/l}</del> Chloride Annual Average Single Value	<del>{A-Avg.: <math>\leq 5</math> —S.V.:}</del> $\leq 5$ mg/l $\leq 7$ mg/l	-- <del>{S.V.:}</del>  $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation.}</del> supply or both, propagation of wildlife, irrigation and <del>{stock watering.}</del> watering of livestock.
Sulfate <del>{mg/l}</del> Single Value	--	<del>{S.V.:}</del> $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> supply, or both.
Sodium <del>{SAR}</del> Adsorption Ratio Annual Average	--	<del>{A-Avg.:}</del>  $\leq 8$	<del>{Irrigation<sup>b</sup>}</del> Irrigation and municipal or domestic supply <del>{,}, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation.}</del> Propagation of aquatic life and propagation of wildlife.
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> Annual Geometric Mean Single Value	-- --	<del>{<math>\leq 200/400^e</math>}</del>  $126$ MF/100 ml $235$ MF/100 ml	<del>{Water contact recreation<sup>b</sup>, noncontact recreation.}</del> Recreation involving contact with water, recreation not involving contact with water, municipal or domestic supply, or both, irrigation <del>{wildlife propagation and stock watering.}</del> and watering of livestock.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.}~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~Increase in turbidity must not be more than 10 NTU above natural conditions.~~

~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

**Sec. 12.** NAC 445A.165 is hereby amended to read as follows:  
445A.165

## STANDARDS OF WATER QUALITY

### East Walker River *at state line*

Control Point at the East Walker River at the state line. The limits of this table apply only to the East Walker River at the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature <del>{°C}</del> <del>Maximum</del> <del>T<sup>a</sup></del> <i>Single Value</i>	<del>T = 0°C<sup>a</sup></del>	Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C <del>T ≤2°C<sup>a</sup></del>	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and recreation involving contact with water.</i> <del>{contact recreation}</del>
pH <del>{Units}</del> <i>Single Value</i>	--	<del>{S.V.: 7.0—8.3}</del> <i>Within Range</i> 6.5 - 9.0 SU _pH: ±0.5 SU Max.	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
Total Phosphates (as P) <del>{—mg/l}</del> <i>Annual Average</i>		<del>{A-Avg.:}</del> ≤0.1 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>}</del> <i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and</i> <del>{noncontact recreation}</del> <i>recreation not involving contact with water.</i>
Nitrogen Species <del>{(N)—mg/l}</del> <i>as N</i> <i>Annual Average</i> <i>Single Value</i> <i>Single Value</i>	Total Nitrogen <del>{A-Avg.: ≤0.8</del> <del>—S.V.:}</del> : ≤0.8 mg/l ≤1.4 mg/l	Nitrate <del>{S.V.: ≤10</del> <del>Nitrite S.V.:}</del> ≤10 mg/l Nitrite: ≤0.06 mg/l Ammonia S.V.: ≤0.02 mg/l (un-ionized)	Municipal or domestic <del>{supply<sup>b</sup>, aquatic life<sup>b</sup>, water contact recreation, stock watering, wildlife propagation and noncontact recreation}</del> <i>supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.</i>
Dissolved Oxygen <del>{—mg/l}</del> <i>Single Value</i>	--	<del>{S.V.:}</del> Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥5.0 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and</i> <del>{noncontact recreation}</del> <i>recreation not involving contact with water.</i>
Suspended Solids <del>{—mg/l}</del> <i>Single Value</i>	<del>{S.V.:}</del> ≤30 mg/l	<del>{S.V.:}</del> ≤80	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life.</i>
Turbidity <del>{—NTU}</del>			<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and municipal</i>

<i>Single Value</i>	--	<del>{d}</del> <i>b</i>	or domestic supply <del>{,}, or both.</del>
Color <del>{PCU}</del> <i>Single Value</i>	--	<del>{e}</del> $\leq 75$ PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> Municipal or domestic supply <del>{,}, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{mg/l}</del> <i>Annual Average</i> <i>Single Value</i>	<del>{A-Avg.: <math>\leq 175</math> —S.V.:}</del> $\leq 175$ mg/l $\leq 210$ mg/l	<del>{A-Avg.:}</del> $\leq 500$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> , supply, or both, irrigation and <del>{stock watering.}</del> watering of livestock.
<del>{Chlorides—mg/l}</del> Chloride <i>Annual Average</i> <i>Single Value</i>	<del>{A-Avg.: <math>\leq 5</math> —S.V.:}</del> $\leq 5$ mg/l $\leq 7$ mg/l	-- <del>{S.V.:}</del> $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation.}</del> supply or both, propagation of wildlife, irrigation and <del>{stock watering.}</del> watering of livestock.
Sulfate <del>{mg/l}</del> <i>Single Value</i>	<del>{}</del> $\leq 26$ mg/l	<del>{S.V.:}</del> $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> supply, or both.
Sodium <del>{SAR}</del> <i>Adsorption Ratio</i> <i>Annual Average</i>	<del>{A-Avg.:}</del> $\leq 2$	<del>{A-Avg.:}</del> $\leq 8$	<del>{Irrigation<sup>b</sup>}</del> Irrigation and municipal or domestic supply <del>{,}, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation.}</del> Propagation of aquatic life and propagation of wildlife.
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> <i>Annual</i> <i>Geometric Mean</i> <i>Single Value</i>	<del>{A.G.M.: <math>\leq 20</math> —S.V.: <math>\leq 50</math>}</del>  -- --	<del>{<math>\leq 200/400^e</math>}</del>  $126$ MF/100 ml $235$ MF/100 ml	<del>{Water contact recreation<sup>b</sup>, noncontact recreation.}</del> Recreation involving contact with water, recreation not involving contact with water, municipal or domestic supply, or both, irrigation <del>{wildlife propagation and stock watering.}</del> and watering of livestock.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.}~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~Increase in turbidity must not be more than 10 NTU above natural conditions.~~

~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

**Sec. 13.** NAC 445A.166 is hereby amended to read as follows:  
445A.166

## STANDARDS OF WATER QUALITY

### East Walker River *south of Yerington*

Control Point at the East Walker River south of Yerington above the confluence with the West Walker River (Nordyke Road). The limits of this table apply to the East Walker River south of Yerington above its confluence with the West Walker River to ~~the state line.~~ ***East Walker River at Bridge B-1475.***

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature <del>{°C}</del> <del>Maximum</del> <del>T<sup>a</sup></del> <i>Single Value</i>	<del>T = 0°C<sup>a</sup></del>	Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C <del>T ≤2°C<sup>a</sup></del>	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and recreation involving contact with water.</i> <del>{contact recreation.}</del>
pH <del>{Units}</del> <i>Single Value</i>	--	<del>{S.V.: 7.0—8.3}</del> <i>Within Range</i> <i>6.5 - 9.0 SU</i> <del>pH: ±0.5 SU Max.</del>	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
Total Phosphates (as P) <del>{mg/l}</del> <i>Annual Average Single Value</i>		<del>{A Avg.: ≤0.16 —S.V.:}</del> ≤0.16 mg/l ≤0.39 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>.}</del> <i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and {nonecontact recreation.} recreation not involving contact with water.</i>
Nitrogen Species <del>{(N)—mg/l}</del> as N <i>Annual Average Single Value</i> <i>Single Value</i> <i>Single Value</i>	Total Nitrogen <del>{A Avg.: ≤0.9 —S.V.:}</del> : ≤0.9 mg/l ≤1.7 mg/l	Nitrate <del>{S.V.: ≤10 —Nitrite S.V.:}</del> : ≤10 mg/l Nitrite: ≤0.06 mg/l  Ammonia S.V.: ≤0.02 mg/l (un-ionized)	Municipal or domestic <del>{supply<sup>b</sup>, aquatic life<sup>b</sup>, water contact recreation, stock watering, wildlife propagation and nonecontact recreation.}</del> <i>supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.</i>
Dissolved Oxygen <del>{mg/l}</del> <i>Single Value</i>	--	<del>{S.V.:}</del> Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥5.0 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and {nonecontact recreation.} recreation not involving contact with water.</i>
Suspended Solids <del>{mg/l}</del>		<del>{S.V.:}</del>	<del>{Aquatic life<sup>b</sup>.}</del> <i>Propagation of aquatic life.</i>

<i>Single Value</i>	--	≤80 mg/l	
Turbidity <del>{-NTU}</del> <i>Single Value</i>	--	<del>{d}</del> <i>b</i>	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life</i> and municipal or domestic supply <del>{,}, or both.</del>
Color <del>{-PCU}</del> <i>Single Value</i>	--	<del>{c}</del> ≤75 PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> <i>Municipal</i> or domestic supply <del>{,}, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{-mg/l}</del> <i>Annual Average</i> <i>Single Value</i>	<del>{A-Avg.: ≤320 —S.V.:}</del> ≤320 mg/l ≤390 mg/l	<del>{A-Avg.:}</del> ≤500 mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> , <i>supply, or both</i> , irrigation and <del>{stock watering&gt;}</del> <i>watering of livestock.</i>
<del>{Chlorides -mg/l}</del> <i>Chloride</i> <i>Annual Average</i> <i>Single Value</i>	<del>{A-Avg. ≤13 —S.V.:}</del> ≤13 mg/l ≤19 mg/l	-- <del>{S.V.:}</del> ≤250 mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation,}</del> <i>supply or both, propagation of wildlife</i> , irrigation and <del>{stock watering&gt;}</del> <i>watering of livestock.</i>
Sulfate <del>{-mg/l}</del> <i>Single Value</i>	<del>{}</del> ≤44 mg/l	<del>{S.V.:}</del> ≤250 mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> <i>supply, or both.</i>
Sodium <del>{-SAR}</del> <i>Adsorption Ratio</i> <i>Annual Average</i>	--	<del>{A-Avg.:}</del> ≤8	<del>{Irrigation<sup>b}</sup>}</del> <i>Irrigation</i> and municipal or domestic supply <del>{,}, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{-mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation&gt;}</del> <i>Propagation of aquatic life and propagation of wildlife.</i>
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> <i>Annual</i> <i>Geometric Mean</i> <i>Single Value</i>	<del>{A.G.M.: ≤75 —S.V.: ≤350}</del>  -- --	<del>{≤200/400<sup>c</sup>}</del>  <i>126 MF/100 ml</i> <i>235 MF/100 ml</i>	<del>{Water contact recreation<sup>b</sup>, noncontact recreation&gt;}</del> <i>Recreation involving contact with water, recreation not involving contact with water</i> , municipal or domestic supply, <i>or both</i> , irrigation <del>{wildlife propagation and stock watering&gt;}</del> <i>and watering of livestock.</i>

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~Increase in turbidity must not be more than 10 NTU above natural conditions.~~

e. ~~Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.~~

**Sec. 14.** NAC 445A.167 is hereby amended to read as follows:  
445A.167

## STANDARDS OF WATER QUALITY

### Walker River *at inlet to Weber Reservoir*

Control Point at the Walker River at the inlet to Weber Reservoir. The limits of this table apply to the Walker River from the inlet to Weber Reservoir to the confluence of the West Walker River and the East Walker River.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature {°C} <del>Maximum</del> <del>T<sup>a</sup></del> Single Value	T = 0°C <sup>a</sup>	Nov.-Mar.: ≤13°C Apr.-Jun.: <del>≤24°C</del> ≤23 °C <sup>b</sup> Jul.-Oct.: ≤28°C T ≤2°C	<del>{Aquatic life<sup>b</sup>}</del> Propagation of aquatic life and recreation involving contact with water. <del>{contact recreation<sup>b</sup>}</del>
pH {Units} Single Value	--	<del>{S.V.: 7.0 — 8.3}</del> Within Range 6.5 - 9.0 SU pH: ±0.5 SU Max.	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering.}</del> Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, <i>or both</i> , and industrial supply.
Total Phosphates (as P) <del>{—mg/l}</del> Annual Average Single Value		<del>{A-Avg.: ≤0.26 — S.V.:}</del> ≤0.26 mg/l ≤0.40 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>—}</del> Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, <i>or both</i> , and <del>{noncontact recreation<sup>b</sup>}</del> recreation not involving contact with water.
Nitrogen Species <del>{(N)—mg/l}</del> as N Annual Average Single Value Single Value	Total Nitrogen <del>{A-Avg.: ≤1.2 — S.V.:}</del> : ≤1.2 mg/l ≤1.5 mg/l	Nitrate <del>{S.V.:≤10 — Nitrite S.V.:≤5}</del> :≤10 mg/l Nitrite: ≤1 mg/l Ammonia S.V.:≤0.06 mg/l (un-ionized)	Municipal or domestic <del>{supply<sup>b</sup>, aquatic life<sup>b</sup>—water contact recreation, stock watering, wildlife propagation and noncontact recreation<sup>b</sup>}</del> supply, <i>or both</i> , propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.
Dissolved Oxygen <del>{—mg/l}</del> Single Value	--	<del>{S.V.:}</del> Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥5.0 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering.}</del> Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, <i>or both</i> , and <del>{noncontact recreation<sup>b</sup>}</del> recreation not involving contact with water.
Suspended Solids <del>{—mg/l}</del> Single Value	--	<del>{S.V.:}</del> ≤80 mg/l	<del>{Aquatic life<sup>b</sup>—}</del> Propagation of aquatic life.

Turbidity <del>{NTU}</del> Single Value	--	D	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life</i> and municipal or domestic supply <del>{,}, or both.</del>
Color <del>{PCU}</del> Single Value	--	<del>{e}</del> $\leq 5$ PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> <i>Municipal or domestic supply</i> <del>{,}, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{mg/l}</del> Annual Average Single Value	<del>{A-Avg.: <math>\leq 400</math> —S.V.:}</del> $\leq 400$ mg/l $\leq 450$ mg/l	<del>{A-Avg.:}</del>  $\leq 500$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> , <i>supply, or both</i> , irrigation and <del>{stock watering&gt;}</del> <i>watering of livestock.</i>
<del>{Chlorides—mg/l}</del> Chloride Annual Average Single Value	<del>{A-Avg.: <math>\leq 30</math> —S.V.:}</del> $\leq 30$ mg/l $\leq 35$ mg/l	-- <del>{S.V.:}</del>  $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation,}</del> <i>supply or both, propagation of wildlife</i> , irrigation and <del>{stock watering&gt;}</del> <i>watering of livestock.</i>
Sulfate <del>{mg/l}</del> Annual Average Single Value	<del>{A-Avg.: <math>\leq 95</math> —S.V.:}</del> $\leq 95$ mg/l $\leq 110$ mg/l	<del>{S.V.:}</del>  $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> <i>supply, or both.</i>
Sodium <del>{SAR}</del> Adsorption Ratio Annual Average	<del>{SAR A-Avg.:}</del>  $\leq 3$	<del>{A-Avg.:}</del>  $\leq 8$	<del>{Irrigation<sup>b</sup>}</del> <i>Irrigation</i> and municipal or domestic supply <del>{,}, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation&gt;}</del> <i>Propagation of aquatic life and propagation of wildlife.</i>
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> Annual Geometric Mean Single Value	<del>{A.G.M.: <math>\leq 100</math> —S.V.: <math>\leq 200</math>}</del>	<del>{<math>\leq 200/400^e</math>}</del>  <i>126 MF/100 ml</i> <i>235 MF/100 ml</i>	<del>{Water contact recreation<sup>b</sup>, noncontact recreation&gt;}</del> <i>Recreation involving contact with water, recreation not involving contact with water</i> , municipal or domestic supply, <i>or both</i> , irrigation <del>{wildlife propagation and stock watering&gt;}</del> <i>and watering of livestock.</i>

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. ~~{The most restrictive beneficial use.~~
- c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~ *The temperature beneficial use standard is  $\leq 21^{\circ}\text{C}$  during February through June when Lahontan cutthroat trout are present in the reach from Walker Lake to Weber Reservoir.*
- d. *The nitrite beneficial use standard is  $\leq 0.06$  mg/l during February through June when Lahontan cutthroat trout are present in the reach from Walker Lake to the Weber Reservoir.*
- e. Increase in turbidity must not be more than 10 NTU above natural conditions.
- ~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

**Sec. 15.** NAC 445A.168 is hereby amended to read as follows:

445A.168

## STANDARDS OF WATER QUALITY

### Walker River *at Schurz Bridge*

Control Point at Schurz Bridge. The limits of this table apply from the inlet to Walker Lake to Weber Reservoir.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature [°C] <del>Maximum</del> <del>T<sup>a</sup></del> <i>Single Value</i>	<del>T = 0°C<sup>a</sup></del>	Nov.-Mar.: ≤13°C Apr.-Jun.: ≤23°C <sup>b</sup> Jul.-Oct.: ≤28°C <del>T</del> ≤2°C	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and recreation involving contact with water.</i> <del>{contact recreation}</del>
pH [Units] <i>Single Value</i>	--	<del>{S.V.: 7.0 – 8.3}</del> <i>Within Range</i> 6.5 - 9.0 SU pH: ±0.5 SU Max.	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
Total Phosphates (as P) [ <del>mg/l</del> ] <i>Annual Average</i> <i>Single Value</i>		<del>{A-Avg.: ≤0.17</del> <del>S.V.:}</del> ≤0.17 mg/l ≤0.23 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>}</del> <i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and {nonecontact recreation} recreation not involving contact with water.</i>
Nitrogen Species [ <del>(N) – mg/l</del> ] as N <i>Annual Average</i> <i>Single Value</i> <i>Single Value</i>	Total Nitrogen <del>{A-Avg.: ≤0.6</del> <del>S.V.:}</del> : ≤1.2 mg/l ≤1.5 mg/l	Nitrate <del>{S.V.: ≤10</del> <del>Nitrite S.V.:}</del> : ≤10 mg/l Nitrite: ≤1 mg/l Ammonia S.V.: ≤0.06 mg/l (un-ionized)	Municipal or domestic <del>{supply<sup>b</sup>, aquatic life<sup>b</sup>, water contact recreation, stock watering, wildlife propagation and nonecontact recreation}</del> <i>supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.</i>
Dissolved Oxygen [ <del>mg/l</del> ] <i>Single Value</i>	--	<del>{S.V.:}</del> <del>Nov.-Apr.: ≥6.0</del> <del>May-Oct.:}</del> Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥5.0 mg/l	<del>{Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and {nonecontact recreation} recreation not involving contact with water.</i>
Suspended Solids [ <del>mg/l</del> ] <i>Annual Average</i> <i>Single Value</i>	<del>{A-Avg.:}</del> ≤60 mg/l	<del>{S.V.:}</del> ≤80 mg/l	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life.</i>

Turbidity <del>{NTU}</del> Single Value	--	D	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life</i> and municipal or domestic supply <del>{,}, or both.</del>
Color <del>{PCU}</del> Single Value	--	<del>{e}</del> $\leq 5$ PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> <i>Municipal or domestic supply</i> <del>{,}, or both, and propagation of aquatic life.</del>
Total Dissolved Solids <del>{mg/l}</del> Annual Average Single Value	<del>{A-Avg.: <math>\leq 390</math> —S.V.:}</del> $\leq 390$ mg/l $\leq 570$ mg/l	<del>{A-Avg.:}</del> $\leq 500$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> , <i>supply, or both</i> , irrigation and <del>{stock watering&gt;}</del> <i>watering of livestock.</i>
<del>{Chlorides—mg/l}</del> Chloride Annual Average Single Value	<del>{A-Avg.: <math>\leq 23</math> —S.V.:}</del> $\leq 23$ mg/l $\leq 34$ mg/l	-- <del>{S.V.:}</del> $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation,}</del> <i>supply or both, propagation of wildlife</i> , irrigation and <del>{stock watering&gt;}</del> <i>watering of livestock.</i>
Sulfate <del>{mg/l}</del> Single Value	--	<del>{S.V.:}</del> $\leq 250$ mg/l	Municipal or domestic <del>{supply<sup>b</sup>}</del> <i>supply, or both.</i>
Sodium <del>{SAR}</del> Adsorption Ratio Annual Average	<del>{SAR A-Avg.:}</del> $\leq 3$	<del>{A-Avg.:}</del> $\leq 8$	<del>{Irrigation<sup>b</sup>}</del> <i>Irrigation</i> and municipal or domestic supply <del>{,}, or both.</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation&gt;}</del> <i>Propagation of aquatic life and propagation of wildlife.</i>
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> Annual Geometric Mean Single Value	<del>{A.G.M.: <math>\leq 50</math> —S.V.: <math>\leq 110</math>}</del>	<del>{<math>\leq 200/400^c</math>}</del>  <i>126 MF/100 ml</i> <i>235 MF/100 ml</i>	<del>{Water contact recreation<sup>b</sup>, noncontact recreation&gt;}</del> <i>Recreation involving contact with water, recreation not involving contact with water, municipal or domestic supply, or both, irrigation</i> <del>{wildlife propagation and stock watering&gt;}</del> <i>and watering of livestock.</i>

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.}~~

c. ~~{Increase in color must not be more than 10 PCU above natural conditions.}~~ *The temperature beneficial use standard is  $\leq 21^{\circ}\text{C}$  during February through June when Lahontan cutthroat trout are present.*

d. *The nitrite beneficial use standard is  $\leq 0.06$  mg/l during February through June when Lahontan cutthroat trout are present.*

e. Increase in turbidity must not be more than 10 NTU above natural conditions.

~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

**Sec. 16.** NAC 445A.169 is hereby amended to read as follows:  
**445A.169**

## STANDARDS OF WATER QUALITY

## Desert Creek

Control Point at Desert Creek. The limits of this table apply to Desert Creek from its confluence with the West Walker River to the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES (Most stringent use listed first)
Temperature $^{\circ}\text{C}$ <del>Maximum</del>  <del><math>^{\circ}\text{F}</math></del> } <i>Single Value</i>	$T = 0^{\circ}\text{C}^a$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $T \leq 2^{\circ}\text{C}^a$	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and recreation involving contact with water .</i> <del>{contact recreation.}</del>
pH {Units} <i>Single Value</i>	--	<del>{S.V.: 7.0 — 8.3}</del> <i>Within Range 6.5 - 9.0 SU</i> $\text{pH}: \pm 0.5 \text{ SU Max.}$	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>, aquatic life, irrigation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.</i>
Total Phosphates (as P) <del>{mg/l}</del> <i>Annual Average Single Value</i>	<del>{S.V.}</del>  $\leq 0.13 \text{ mg/l}$	<del>{A Avg.:}</del>  $\leq 0.1 \text{ mg/l}$	<del>{Aquatic life<sup>b</sup>, water contact recreation<sup>b</sup>}</del> <i>Propagation of aquatic life, recreation involving contact with water, municipal or domestic supply, or both, and</i> <del>{noncontact recreation.}</del> <i>recreation not involving contact with water.</i>
Nitrogen Species <del>{(N) — mg/l}</del> as N <i>Annual Average Single Value</i>  <i>Single Value</i>  <i>Single Value</i>	Total <del>{Nitrates A Avg.: <math>\leq 0.20</math> — S.V.:}</del> <i>Nitrate:</i> $\leq 0.20 \text{ mg/l}$ $\leq 0.27 \text{ mg/l}$	Nitrate <del>{S.V.: <math>\leq 10</math> — Nitrite S.V.:}</del> $\leq 10 \text{ mg/l}$ <i>Nitrite:</i> $\leq 0.06 \text{ mg/l}$ <i>Ammonia S.V.: <math>\leq 0.02 \text{ mg/l}</math> (un-ionized)</i>	Municipal or domestic <del>{supply<sup>b</sup>, aquatic life<sup>b</sup> water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>supply, or both, propagation of aquatic life, recreation involving contact with water, watering of livestock, propagation of wildlife and recreation not involving contact with water.</i>
Dissolved Oxygen <del>{mg/l}</del> <i>Single Value</i>	--	<del>{S.V.:}</del> Nov.-May: $\geq 6.0 \text{ mg/l}$ Jun.-Oct.: $\geq 5.0 \text{ mg/l}$	<del>{Aquatic life<sup>b</sup>, water contact recreation, wildlife propagation, stock watering.}</del> <i>Propagation of aquatic life, recreation involving contact with water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and</i> <del>{noncontact recreation.}</del> <i>recreation not involving contact with water.</i>
Suspended Solids <del>{mg/l}</del> <i>Single Value</i>	--	<del>{S.V.:}</del>  $\leq 80 \text{ mg/l}$	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life.</i>
Turbidity <del>{NTU}</del> <i>Single Value</i>	--	<del>{d/b}</del>	<del>{Aquatic life<sup>b</sup>}</del> <i>Propagation of aquatic life and municipal or domestic supply</i> <del>{, or both.}</del>

Color <del>{PCU}</del> Single Value	--	<del>{e}</del> ≤75 PCU	<del>{Aquatic life<sup>b</sup> and municipal}</del> Municipal or domestic supply <del>{, or both, and propagation of aquatic life.}</del>
Total Dissolved Solids <del>{mg/l}</del> Annual Average Single Value	<del>{A-Avg.: ≤110 —S.V.:}</del> ≤110 mg/l ≤130 mg/l	<del>{A-Avg.:}</del> ≤500 mg/l	Municipal or domestic <del>{supply<sup>b</sup>,}</del> supply, or both, irrigation and <del>{stock watering,}</del> watering of livestock.
<del>{Chlorides—mg/l}</del> Chloride Annual Average Single Value	<del>{A-Avg.≤5 —S.V.:}</del> ≤5 mg/l ≤7 mg/l	-- <del>{S.V.:}</del> ≤250 mg/l	Municipal or domestic <del>{supply<sup>b</sup>, wildlife propagation,}</del> supply or both, propagation of wildlife, irrigation and <del>{stock watering,}</del> watering of livestock.
Sulfate <del>{mg/l}</del> Single Value	--	<del>{S.V.:}</del> ≤250 mg/l	Municipal or domestic <del>{supply<sup>b</sup>,}</del> supply, or both.
Sodium <del>{SAR}</del> Adsorption Ratio Annual Average	--	<del>{A-Avg.:}</del> ≤8	<del>{Irrigation<sup>b</sup>}</del> Irrigation and municipal or domestic supply <del>{, or both.}</del>
Alkalinity (as CaCO <sub>3</sub> ) <del>{mg/l}</del>	--	less than 25% change from natural conditions	<del>{Aquatic life<sup>b</sup> and wildlife propagation,}</del> Propagation of aquatic life and propagation of wildlife.
<del>{Fecal Coliform No./100 ml}</del> <i>Escherichia coli</i> Annual Geometric Mean Single Value	<del>{A.G.M.:≤100 —S.V.: ≤200}</del>	<del>{≤200/400*}</del>  126 MF/100 ml 235 MF/100 ml	<del>{Water contact recreation<sup>b</sup>, noncontact recreation,}</del> Recreation involving contact with water, recreation not involving contact with water, municipal or domestic supply, or both, irrigation <del>{wildlife propagation and stock watering,}</del> and watering of livestock.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

b. ~~{The most restrictive beneficial use.}~~

c. ~~Increase in color must not be more than 10 PCU above natural conditions.~~

d. ~~{Increase in turbidity must not be more than 10 NTU above natural conditions.}~~

~~{e. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.}~~

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